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THE
BOTANICAL EXCHANGE CLUB.

REPORT OF THE CURATOR

FOR 1870,

AND

LIST OF DESIDERATA

FOR 1871.

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THE
BOTANICAL EXCHANGE CLUB.

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REGULATIONS OF THE CLUB.

1. The object of the Botanical Exchange Club is to facilitate the exchange of dried specimens of British plants, especially of critical species, and varieties. Any one wishing to become a member will be admitted on payment, to either of the Secretaries, of an annual subscription of Five Shillings; and on sending a parcel of dried plants in accordance with the subsequent rules will be enrolled as a "contributing member." He will then be entitled to share in the distribution of specimens made in January of the year following that in which his subscription and parcel were sent.

2. Specimens sent for distribution must be carefully dried; must not exceed in size half a sheet of demy (16 by 10 inches); and must illustrate the species they represent as completely as possible. Plants more than 16 inches long should be once or twice folded, if by so doing the roots can be preserved. (In the *Cyperaceæ*, *Gramina*, and smaller Ferns no specimens should be sent without roots, except in the case of very rare species, which might be in danger of extermination.) No plant must be sent that is not included in the list of desiderata for the current year, unless it be additional to those enumerated in the 6th edition of the 'London Catalogue of British Plants,' or be from an unrecorded station, or be a variety.

3. *Each specimen* must have a label, bearing the number and name of the species as given in the 6th edition of the 'London Catalogue;' also the locality and county where, and the date when, the specimen was collected, and the collector's name. The label should be affixed to the specimen by cutting a transverse slit in the base of the label,

through which the specimen may be pushed. Any facts connected with a species which the sender thinks important and suitable for the 'Report' should be communicated on a separate piece of paper, written on one side only. Specimens sent not in accordance with Rules 2 and 3 will be destroyed.

4. Each parcel should be accompanied by a list of the plants the member wishes to receive from the Club. This list is to be made by drawing a short line before their names in the 6th edition of the 'London Catalogue.'* The name of the member and address to which the return parcel is to be sent should be written on the outside of the Catalogue. Manuscript lists of desiderata will not be received.

5. Parcels may be sent (*carriage paid*) either to Mr. J. G. Baker or to Dr. Boswell-Syme not later than the 31st of December; those that arrive after that date will not be available for the distribution for the current year. Members sending more valuable parcels will have their return parcels selected before those who send inferior ones.

6. Members who do not send parcels, but who have paid their subscriptions for the year, and sent lists of desiderata before December 31st, will share in the annual distribution; but the specimens for such non-contributing members will not be selected until the parcels of all the contributing members have been made up.

* Published by Mr. R. Hardwicke, 192, Piccadilly, London, W. (Price 6d.; post-free, 7d.)

REPORT FOR THE YEAR 1870.

BY THE CURATOR.

I regret to have to notice this year a large increase in the proportion of non-contributing members to those who send parcels. I would beg to suggest to the members that an increase of contributing members is essential to the continuance of the Exchange Club, and I would urge them to try and enrol new contributors among their friends, so as to enlarge as much as possible the area from which plants can be collected for distribution. Great credit, for the numerous interesting species sent, is due to those who have collected plants for the club this year, among which the following are the most deserving of notice:—

Thalictrum Kochii, Fries. “Loch Conn, co. Mayo; new to the Irish flora.”—A. G. MORE.

Nuphar pumila, DC. “Loch Lubnaig. I do not recollect that this local plant has been recorded from the Loch above mentioned, though it has been long known to grow in the Loch of Menteith, in the same county, about five or six miles distant from Loch Lubnaig.”—A. CRAIG CHRISTIE.

Alyssum incanum, L. “Some scores of plants were seen in two clover fields in Surrey, about a dozen miles apart; one being at Pirford, the other at Frimley. As I had never, before 1870, been within half a mile of either field, I cannot say whether the occurrence of the plant was limited to that year. Further particulars stated in the ‘Journal of Botany’ for December, 1870.”—H. C. WATSON.

Sisymbrium polyceratum, L. “From Charlestown, Fife, introduced with ballast? in great quantity.”—A. CRAIG CHRISTIE.

Erysimum cheiranthoides. “This plant is a common weed in and around Brixton. I have noticed it for several successive years.”—AUGUSTIN LEY.

Brassica campestris, L. (?) "A series of specimens from the Thames side, in Surrey, to illustrate the gradual change, from the rough and clear green leaves of the young plant, to the smooth and subglaucous leaves of the flowering stage. This plant is plentiful in various spots along the course of the Thames, in Surrey and Middlesex, where it has been perfectly established for many years. A doubt of its original nativity there is suggested by the fact that it seldom (if ever) spreads more than very short distances from the river into the neighbouring fields. Except in the constantly thin and stringy root, it scarcely differs from the cultivated Turnip. In other respects it appears to have closer affinity with the Turnip than it has with the Wild Navew, or *Brassica campestris*, figured in 'English Botany.' All three are clearly distinct from the Swede Turnip of agriculture—easily known from them by the glaucous hue of the radical leaves, even the earliest, and the pale buff-orange tint of its considerably larger flowers. See 'Journal of Botany' for December, 1870."—H. C. WATSON.

Polygala calcarea, F. Schultz. "Swincomb Down, Oxon. I am not aware that *P. calcarea* has been recorded from Oxfordshire, although it is plentiful on the Berkshire side of the river."—J. F. DUTHIE.

Dianthus prolifer, Linn. "Near Southsea, Hants. Not very recently recorded from this coast."—FRED. STRATTON.

Silene maritima, With. ? "Specimens of a plant, most like this, but by the many-flowered panicles, and not densely matted barren stems, showing some likeness to *Silene inflata*, Sm. They grew just opposite the town of Saltash, on the Devon side of the Tamer, which at the point indicated is a tidal river."—T. R. ARCHER BRIGGS. These specimens are almost identical in appearance with the form which ordinary *Silene maritima*, from Shoreham, Sussex, assumed when transplanted to the garden of my former residence, in Adelaide Road, London, in which it grew in a shady situation. In Balmuto garden, however, the same species, transplanted from Seafield, Fife, has retained its normal appearance.

Sagina ciliata, Fries. Arroch Hill, Fife, J. Boswell Syme; and North Queensferry, Fife, A. Craig Christie. In the former station this plant grows in profusion at the east base of the hill, along the road leading from the Kirkcaldy and Aberdour Turnpike to Arroch Farm.

Spergularia neglecta, Syme. "Tabley roads, Knutsford, Cheshire."
—J. L. WARREN. Notable as being an inland station for a plant which is ordinarily maritime. (See Journ. Bot. viii. p. 252.)

S. rupicola, Lebel. (*rupestris*, Lond. Cat.). Maritime rocks, Colvend, Kirkcudbrightshire, F. Buchanan White; and Dingle rocks, south of Liverpool, Lancashire, J. Harbord Lewis. This plant was first introduced into the British list, in the 'London Catalogue' of 1857, on my own authority, from specimens collected in Guernsey in 1853. In 1860 it was detected in Britain proper, in the Isle of Wight, by Mr. A. G. More. Since then it has been found along the south and west coast, from Dorset to Cheshire. Mr. Lewis now adds Lancashire to the counties in which it occurs; and Dr. Buchanan White traces the plant into Scotland.

Linum angustifolium (Huds.). Herefordshire. "I am informed by the Rev. W. H. Purchas that the locality from which I send it, is the only *certain* locality in the county of Herefordshire. I noticed it at this spot some years ago; and again found it there abundantly this year."—AUGUSTIN LEY.

Tilia grandifolia, Ehrh. "Keswick, Cumberland. Not recorded in 'Compendium of the Cybele Britannica' for the lake province. *T. intermedia*, DC., is the common form; but there are numerous trees of *T. grandifolia* along the western side of Derwentwater."—CHARLES BAILEY. "I have seen it in several places in the lake district, but none where it looked really wild."—J. G. BAKER.

Hypericum beticum, Boiss. "From Devon stations, near Plymouth. The flowers of the plant from Warleigh are rendered smaller than usual by drought. The Common wood specimens, with larger flowers, were collected after the weather had become wetter."—T. R. ARCHER BRIGGS.

Sarothamnus scoparius, Koch, var. *albus*. "Roadside, between Nairn and Cawdor, N. B."—J. DUTHIE.

Trifolium hybridum, Linn. "Knutsford, Cheshire." — J. L. WARREN.

Geum intermedium, Ehrh. "Skipton, Yorkshire. Very common between Skipton and Bolton Abbey. *G. rivale* and *G. urbanum*, particularly the former, also abundant. This plant occurs at Lymm, and in the neighbourhood, but always planted."—C. BAILEY.

"*Rosa canina*, var.?" Near Richmond, York; J. Ward. "Belongs

to *R. tomentosa*, not *R. canina*, the form characterized by the combination of simply toothed leaves, with a glabrous peduncle and calyx. It touches close upon *R. furinosa*, Rau, and *R. cinerascens*, Dum.; but I do not know that it has been specially named.”—J. G. BAKER.

Rosa micrantha, Sm., var. *Briggsii*, Baker. “Collected from the plant so named by Mr. Baker in his recent ‘Monograph of the British Roses.’ Specimens from Fancy, of another naked-peduncled form of *R. micrantha*, with very small fruit, are sent, that they may be compared with the other.”—T. R. ARCHER BRIGGS.

R. verticillacantha, Merat. “From Harestone, Brixton, showing a peculiar armature on the branches. The form from Warleigh is remarkable for having prickly fruit.”—T. R. ARCHER BRIGGS.

R. arvensis, Linn. var. *bibracteata*, Bast. “This occurs in many spots near Plymouth.”—T. R. ARCHER BRIGGS.

R. arvensis, Huds. var. Chesterton Wood, Warwick; H. Bromwich. “A very curious form, bearing the same relation to the type that my var. *gallicoides*, from the same station, bears to typical *R. stylosa*. It is not named in Continental books, so far as I know.”—J. G. BAKER.

Pyrus communis, Linn. “Hedge, between Thornbury and Common Wood, Devon.”—T. R. ARCHER BRIGGS. A well-marked form which I cannot identify with any of those described by French writers. The branches are apparently not spinous, the leaves small, about an inch long, oval, acuminate, rounded at the base, finely crenate-serrate, very slightly pubescent beneath and on the margins when young, glabrous when mature. Flowers small, about $\frac{3}{4}$ inch across, in a cyme, of which the rachis is often so elongated that it becomes somewhat racemose. Calyx densely and finely woolly; styles a little shorter than the stamens. Fruit $\frac{3}{8}$ to $\frac{1}{2}$ inch long, roundish, turbinate abruptly narrowed into the long pedicel. I propose the name of *Briggsii* for this form in the event of its being destitute of a name.

P. scandica, Bab., var. *fennica*. “Glen Eisna Vearrach, Arran; and *P. scandica*, var. *pinnatifida*. Side of rocky stream, Glen Catocal, Arran.”—J. F. DUTHIE. Mr. Duthie has settled the point of there being two forms of *P. scandica* in Arran, one of which has the leaves with none of the segments separated, the other, with some of the leaves at least pinnate towards the base. All the specimens which he found in one glen belonged to the former, and all those in an adjacent glen to the other. He had an opportunity of tasting the fruit of both, and

found it to be sweet. Fries thinks this the best mode of discriminating the pinnatifid variety of his *Sorbus scandica* from *Sorbus fenica*, Fries, of which the fruit is acid. The Arran plant appears to be a subspecies different from that of the south-west of England, which has been sent by Mr. T. R. Archer Briggs and others.

Epilobium angustifolium, Linn. var. *brachycarpum*. "Cocken Woods, Durham."—H. E. Fox. Unfortunately there is no note to the specimen to say whether or not it has any claim to be considered native in this station.

Ribes alpinum, L. "The specimens which I send from Herefordshire are from a bush growing in a locality where it presents all the appearance of being planted or naturalized. I send also specimens from Derbyshire. I have found it in three or four different localities in the Peak of Derbyshire, growing very freely, and evidently fully naturalized, if not native."—AUGUSTIN LEY.

Saxifraga umbrosa. "The locality in Ashwood Dale, near Buxton, is at least a quarter of a mile from any house. The plant here is very luxuriant, and seems as truly wild as in any part of England."—AUGUSTIN LEY.

Caucalis latifolia, Linn. "Cornfields, near Kagushavern, Gloucestershire. Introduced."—T. B. FLOWER.

Picris hieracioides, Linn., var. *arvalis*. "Sychtyn Limerocks, Shropshire."—Miss E. JONES. The specimens sent by Miss Jones show that *P. arvalis*, Jord. passes gradually into normal *P. hieracioides*. All Miss Jones's specimens are taller, more slender, and with less spreading branches than *P. hieracioides*, as it grows on the chalk, and a few of them have the subumbellate inflorescence which marks Jordan's plant; but in by far the greater number the branches which bear the anthodes do not mostly spring from one point.

Hieracium pedunculatum, Wallroth. Railway bank, at Inverleith, Edinburgh. Mr. Sadler sends a few specimens of this plant under the name of *H. stoloniflorum*. I have not access to Waldstein and Kitaibel's work; but it is certainly not the *H. stoloniflorum* of Fries' 'Epicrisis.' Of the latter I possess specimens collected at Frankfort-on-the-Oder, sent me by the late Herr Buek.* Fries quotes '*H.*

* The plant from the railway bank, at Granton, Edinburgh, collected by Mr. Sadler, in 1869, is certainly *H. stoloniflorum* of Waidst. and Kit.—H. TRIMEN.

pedunculare,' Wallr., as a variety of *H. Pilosella*; but as he quotes the same page of the Sched. Crit. (406) as that on which Wallroth gives his *H. pedunculatum*, no doubt Fries means to put *H. pedunculatum* as a variety of *H. Pilosella*. Whether it be a variety or subspecies remains to be proved by raising the plant from seed.

Hieracium dubium, Linn. Dr. Roy sends a specimen of a *Hieracium* which was noticed several years ago, by the Rev. James Keith, of Forres, on a piece of waste ground near that town. I believe it to be the plant formerly called, by Fries, *H. collinum*, but which he now considers to be the true *H. dubium* of Linnæus. The periclinal lines of the only Forres specimen I have seen are smaller, the peduncles longer, and the leaves on the stolons less developed than in the ordinary form of the Scandinavian *H. dubium*; but Fries states that it is even more protean and polymorphous than the very variable *H. præaltum*, which it replaces in colder countries. I cannot, therefore, speak with certainty as to the name of the Forres plant until I have seen a series of specimens.

H. Borreri, Syme. Cultivated in Balmuto Garden. The root originally from Mr. Borrer, through Mr. H. C. Watson. It is probably the *H. perfoliatum*, Frölich, though I have a specimen named '*H. Grenieri*,' Fries, collected at Freiburg by Dr. Lager, and sent me last year by Dr. Huter, which comes very near it, though it is more hairy, and with larger and fewer anthodes. *H. Grenieri* is not described by Fries in his '*Epicrisis Hieraciorum*;' but he proposes the name for a plant intermediate between *H. cydoniaefolium*, Vill., and *H. prenanthoides*, Vill. Dr. Hooker, in the '*Student's Flora*,' quotes my *H. Borreri* as a synonym of *H. strictum*, with which it has no affinity. Probably this is a clerical error in the position of the synonym, which ought to have been placed under *prenanthoides*.

H. strictum, Fries. Banks of the Devon between the Crook of Devon and Rumbling Bridge, Kinross. It occurs very sparingly on rocks by the river-side; and as the plant does not seem to be generally known, I thought it advisable to mention this station, although it has been long known in two others in the neighbourhood, viz. Glendevon, Perthshire, and Lethansdene, Fife.

Borkhausia foetida, DC. "Railway banks, Bathampton, near Bath, Somerset." T. B. FLOWER.—New to the province, but the designation "railway banks" suggests a suspicion that it is not native. The

county of Hereford, given in the third edition of 'English Botany,' should probably be expunged. It was entered on the faith of a specimen received from the Botanical Society of Edinburgh, with the label "Near Reading, Herefordshire, W. M'Ivor." As I can hear of no Reading in Herefordshire, it was probably collected near Reading, Berkshire.

Centaurea Jacea, Linn. (*C. Duboisii*, Bor.). "Three plants were found amongst *C. nigra*, Yarrow and Broom in Kew pleasure-ground, near the lake, Surrey."—J. G. BAKER.

Doronicum Pardalianches, Linn. Right bank of the Devon, below the Crook, Perthshire. It grows in the greatest profusion for nearly a quarter of a mile along the river-side, being far more plentiful than in any other localities in which I have seen it.—J. BOSWELL SYME.

Cuscuta Trifolii, Bab. "Clover fields near Leggieden, Perth." H. M. DRUMMOND HAY.—Colonel Drummond Hay states that this is the first season in which he has noticed the Dodder "in this immediate neighbourhood." Last year I observed it in a clover-field between Kirkcaldy and Kinghorn.

Verbascum phlomoides, L. (?). "Near Buxton, Derbyshire."—AUGUSTIN LEX.

Mentha rubra, Sm. "Roadside, near Ecclesfield, Yorkshire."—W. CARR.

Pinguicula grandiflora, Lam. "Marsh near Penzance, Cornwall. Introduced, but quite established."—H. M. DRUMMOND HAY.

Chenopodium rubrum, Linn., var. *pseudo-botryoides*. "Shore of Kinghorn Lock, Fife. In the utmost profusion on the banks of the lock, below the winter level of the water, in a situation quite similar to that in which I have collected it, with Mr. H. C. Watson, in Surrey. This is the more curious, as I have not met with the normal form of *C. rubrum* in Fife, except as a weed in my own garden, into which it was no doubt introduced by seeds adhering to the roots of plants brought hither from my former garden in Adelaide Road, London."—J. BOSWELL SYME.

Rumex Hydrolapathum, Huds. "Banks of the Tay, at Elcho Castle, Perth."—H. M. DRUMMOND HAY. A very scarce plant in Scotland, the occurrence of which, in the county of Perth, required to be substantiated. There can now be no doubt that the plant grows there, and the only question that remains is, whether it be indigenous,

the banks of the Tay producing so vast a number of aliens that suspicion is sometimes cast on plants which are true natives of the locality."

Rumex conspersus, Hartm. "Banks of the Devon, above and below the Crook, Kinross and Perth. In the utmost profusion, even more abundant than *R. obtusifolius*, and much more so than *R. domesticus*, so that it can scarcely be a hybrid between these two species. In this locality it seeds profusely, and I have at present numbers of young plants raised from these seeds. It may be recognized at a distance from *R. obtusifolius* by being taller (generally 3 or 4 feet high), and by the branches being more upright, though the panicle is not at all dense like that of *R. domesticus*, which, in this station, is rarely above 1 foot or 18 inches high."—J. BOSWELL SYME.

Rumex? "Crook of Devon, Kinross and Perth. I have sent a few specimens of a *Rumex* which is a puzzle to me. It grows in the same stations as *R. conspersus*, but is less abundant. The stems are 18 inches to 3 feet high; the root leaves narrowly oblong, scarcely cordate at the base, and subacute; the panicle is very similar to that of *R. obtusifolius*, but the enlarged petals, which are of a brilliant red, are smaller, more deltoid, and with shorter teeth. It seems intermediate between *R. obtusifolius* and the supposed hybrid sent by me last year."—J. BOSWELL SYME.

Asarum europæum (L.). "Deerfold Forest, Herefordshire. The specimens are from the locality communicated to Mr. Britten by Dr. Bull, and mentioned in the 'Journal of Botany' for 1870, p. 161."—AUGUSTIN LEY.

Euphorbia Lathyris. "The locality, at Brimton, Herefordshire, for this plant is the side of a steep wooded bank, where it has been fully established for some years, and has the appearance of being natural. There are, however, gardens and houses within a short distance."—AUGUSTIN LEY.

Narcissus major, Curt. "Thickets, Penygraig rocks, Glyn, Llangollen, Denbighshire."—ELIZABETH JONES.

Allium carinatum, Linn., Fries *non* Smith. Banks of the Tay below Perth (FRED. STRATTON and J. BOSWELL SYME); and banks of the Tay at Leggieden, Perth.—H. M. DRUMMOND HAY.

The plant grows in the greatest profusion along the banks of the Tay, especially a little above the first turnpike-gate on the Dundee Road, more than a mile below Perth Bridge. Leggieden, from whence

specimens are sent by Colonel Drummond Hay, is, I believe, about three miles below Perth Bridge. The plant is certainly well naturalized on the banks of the Tay, if it be not native. Dr. Hooker, in the 'Student's Flora,' admits it as a native, on the faith of the Newark station, where, however, it appears to be confined to a single patch.

Allium paradoxum, Don. "Benny Crag, Linlithgowshire. In very large quantity, and has spread very much within the last few years."—A. CRAIG CHRISTIE.

Maianthemum bifolium, DC. "Wood, Linlithgowshire. Probably introduced, but if so it must have been a long time ago, as it is well established, and in quantity."—A. CRAIG CHRISTIE.

Butomus umbellatus, Linn. "Abundant in a tidal marsh on the Tay, about four miles below Perth."—JOHN SIM. Mr. Sim states that it was discovered in this station in 1869, by Colonel Drummond Hay. In the April number of the 'Scottish Naturalist,' p. 59, Dr. Buchanan White suggests that it is "possibly a colony from Loeh Cluny, where the *Butomus* occurs as an introduced plant."

Potamogeton nitens, Weber. A specimen sent by Dr. Roy adhering to living plants of *Carex Watsoni*, from the river Don, Aberdeenshire.

Juncus biglumis, Linn. "Isle of Skye, Inverness-shire."—M. A. LAWSON. Professor Lawson is the first botanist who has found this plant in the west of Scotland.

Scirpus uniglumis, Link. "Sandhills near Deal, Kent."—J. F. DUTHIE. New to province 3.

S. parvulus, Röm. and Schultes. "Near Studland, Dorset."—J. C. MANSEL (Journ. of Bot. viii. p. 290). Mr. H. C. Watson sends some specimens collected by Mr. Mansel in this station.

Carex arenaria, Linn. "Sandy ground near Frensham, Surrey."—H. C. WATSON. These inland specimens are quite similar to the maritime ones, and show no tendency to become *C. disticha*, Huds., which Mr. Bentham asserts to be merely "an inland variety of *C. arenaria*."

C. aquatilis, Wahl.?, var. *Watsoni*. "River Don, Aberdeen."—J. ROY. Dr. Roy has been good enough to send living specimens of the *Carex* supposed to be *C. acuta*, which grows in the river Don, near Aberdeen. As I expected, it proves to be *C. Watsoni*. The leaves are narrower and much more glaucous than in the alpine form of *C.*

agnatilis, the stems 2 to 3 feet high. Dr. Hooker, in the 'Student's Flora,' inadvertently quotes my var. *Watsoni* as a synonym of Dr. Boott's "var. 2, minor," instead of under "var. 1, *aquatilis* proper," under which, I suppose, it ought to be, though the stem can scarcely be described as "seaberulous above."

Carex flava, var. *lepidocarpa*. "Orroeh Hill, Fife. I collected a few specimens of this plant, but not nearly enough to satisfy the demands for it. This can only be from the plant not being properly known. I am confirmed in this opinion by some remarks by a botanist so well acquainted with Carices as Mr. Sidebotham at the Literary and Philosophical Society of Manchester, where he remarks that in *C. lepidocarpa* the fruit is "pale green, or yellowish-green, and the beak straight." There is no perceptible difference in the colour of the fruit of *C. lepidocarpa* and *C. flava genuina* when examined in the same stage of ripeness. They both commence with being green and end with being brownish-yellow, and the beak of *C. lepidocarpa* is always deflexed, though not so much so as in the genuine form. Mr. Sidebotham's remarks respecting *C. lepidocarpa* would rather apply to *C. Oederi*. *C. Oederi* has no special partiality for the coast, either in England or Scotland; this is in answer to a query put in the April number of the 'Journal of Botany.'"—J. BOSWELL SYME.

C. punctata, Gaud. "Co. Cork."—I. CARROLL. Mr. A. G. More has sent a specimen of the veritable plant, so that the ? given after Ireland, in the third edition of 'English Botany,' vol. x. p. 151, must be expunged.

Alopecurus fulvus, Sm. "The locality from which the specimen was gathered was discovered by Rev. W. H. Pureshas in 1869; the plant is new to Herefordshire."—A. LEX.

Agrostis setacea, Curtis. "Sparingly on Woking Heath, between the Woking Station and the Dramatic College; confirming the grass to the county of Surrey, although in a different part of it from the old and doubted localities."—H. C. WATSON.

Aira uliginosa, Weihe. "Swampy hollows, nearly dry in July, on Woking Heath, Surrey; one of them about a quarter of a mile southward from the Dramatic College, the other about the like distance nearer to Woking Station. It may shortly become extinct in both, through the progress of enclosure and drainage. Some specimens were dried for distribution, as better showing the tufted growth than

did those brought from Fleet Pond, Hampshire, in 1869, two months later in the season.”—H. C. WATSON. “Still occurs at Loeh O’ Park, and in profusion near Loch Connor, between Aboyne and Ballater; indeed I have a suspicion now that it is abundant in the interior of this district, but at present I can speak with certainty as to these two localities only. The altitude of Loch Connor is 600 feet.”—J. ROY.

Avena strigosa, Schreb. “Rather common in oatfields about Plymouth, but always looking as if sown with the crop.”—T. R. ARCHER BRIGGS.

Festuca ambigua, Le Gall. St. Helen’s Spit, Isle of Wight, June 7, 1870. Mr. Stratton has sent a very large supply of this curious *Vulpia*, collected by Mrs. Stratton. The specimens have a wonderful similarity in habit, which is quite that of *Festuca uniglumis*, except that the florets are but half the size, although in everything but the disposition of the florets of the panicle it can scarcely be distinguished from *F. pseudo-myurus*. It is strange that the plant has not yet been detected in any station but the above, in which it was first discriminated by Mr. A. G. More, about ten years ago. On the Continent it seems equally rare, or little known, as it is only found in a few places in the north-west of France, on the coast of Morbihan.

Asplenium septentrionale, Hull. “Rocks at Parloek, Somerset.”—MARY EDMUNDS. The occurrence of this plant in Somersetshire is doubted in the Supplement to the ‘Cybele Britannica,’ though it is acknowledged as a native of Devon. In the third volume of the ‘Cybele’ itself, the question is raised, whether it occurs in Devon or Somerset, or in both.

Ophioglossum vulgatum, Linn. var. *ambignum*. “Elevated sandy ground, St. Agnes, Seilly Isles, 1863.”—F. TOWNSEND. “It is seventeen years since I detected this curious little form of *Ophioglossum* in the Orkney Islands, in the parish of Orphir Maculand, Orkney. I am not aware that it has been found elsewhere in Britain, except in the Seilly Isles, by Mr. Townsend. On the Continent it has been noticed in a few places in France, near Paris; and also near the Tower of Poëauçy, near Lardy, and at Cape Farret, near Arcaehon. The habit of the smaller specimens of the Orkney plant is extremely similar to that of *O. lusitanicum*, while others from the same station are scarcely distinguishable from normal *O. vulgatum*. Mr.

Townsend's specimens are a little larger than the smallest of those from Orkney. A small form of *O. vulgatum*, collected by Mr. A. G. More, at Garryland, co. Galway, comes very near this in point of size, but the stem-frond is broadest near the base, and the accessory root-frond of var. *ambiguum* is absent, at least in the specimens which he has communicated to me."—J. BOSWELL SYME.

April 8th, 1871.

LIST OF DESIDERATA FOR 1871.

N.B. Of any of the Species included in the following List, specimens varying in number from 10 to 50, according to its degree of rarity, will be acceptable.

<i>Thalictrum montanum.</i>	<i>Cochlearia anglica.</i>
<i>flexuosum.</i>	<i>Iberis amara.</i>
<i>saxatile.</i>	<i>Subularia aquatica.</i>
<i>Kochii.</i>	<i>Draba aizoides.</i>
<i>Anemone apennina.</i>	<i>rupestris.</i>
<i>ranunculoides.</i>	<i>brachycarpa.</i>
<i>Adonis autumnalis.</i>	<i>inflata.</i>
<i>Ranunculus Baudotii.</i>	<i>Camelina eu-sativa.</i>
<i>confusus.</i>	<i>foetida.</i>
<i>pseudo-fluitans.</i>	<i>Koniga maritima.</i>
<i>Bachii.</i>	<i>Cardamine impatiens.</i>
<i>tripartitus.</i>	<i>Arabis stricta.</i>
<i>ophioglossifolius.</i>	<i>ciliata.</i>
<i>Caltha Guérangerii.</i>	<i>hispida.</i>
<i>radicans.</i>	<i>glabrata.</i>
<i>Eranthis-hyemalis.</i>	<i>turrita.</i>
<i>Helleborus viridis.</i>	<i>Barbarca arcuata.</i>
<i>foetidus.</i>	<i>stricta.</i>
<i>Delphinium Consolida.</i>	<i>Sisymbrium polyceratum.</i>
<i>Ajaxis.</i>	<i>Matthiola incana.</i>
<i>Actæa spicata.</i>	<i>sinuata.</i>
<i>Pæonia corallina.</i>	<i>Brassica oleracea.</i>
<i>Nuphar intermedium.</i>	<i>Napus.</i>
<i>pumilum.</i>	<i>Sinapis incana.</i>
<i>Papaver strigosum.</i>	<i>Cheiranthus.</i>
<i>hortense.</i>	<i>Raphanus maritimus.</i>
<i>officinale.</i>	<i>Helianthemum vineale.</i>
<i>Glaucium violaceum.</i>	<i>Breweri.</i>
<i>Corydalis solida.</i>	<i>Viola calcarea.</i>
<i>Fumaria pallidiflora.</i>	<i>permixta.</i>
<i>muralis.</i>	<i>sepincola.</i>
<i>Vaillantii.</i>	<i>stagnina.</i>
<i>Crambe maritima.</i>	<i>Curtisii, vars.</i>
<i>Isatis tinctoria.</i>	<i>Paillouxii.</i>
<i>Thlaspi perfoliatum.</i>	<i>Drosera obovata.</i>
<i>sylvestre.</i>	<i>Polygala grandiflora.</i>
<i>occitanum.</i>	<i>oxyptera.</i>
<i>virens.</i>	<i>ciliata.</i>
<i>Cochlearia alpina.</i>	<i>uliginosa.</i>

- Frankenia lævis.
 Elatine Hydropiper.
 Dianthus prolifer.
 plumarius.
 Caryophyllus.
 cæsius.
 glaucus.
 Saponaria hybrida.
 Silene Otites.
 quinquevulnra.
 paradoxa.
 Lychnis alpina.
 Sagina debilis.
 alpina.
 saxatilis.
 nivalis.
 Spergularia rupestris.
 Arenaria ciliata.
 norvegica.
 laxa.
 viscosa.
 Gerardi.
 rubella.
 uliginosa.
 Holosteum umbellatum.
 Stellaria Boreana.
 umbrosa.
 cerastoides.
 Cerastium holosteoides.
 pentandrum.
 pumilum.
 pubescens.
 latifolium.
 nigrescens.
 Althæa hirsuta.
 Lavatera arborea.
 Tilia corallina.
 Hypericum dubium.
 maculatum.
 linariifolium.
 montanum.
 calycinum.
 Geranium purpureum.
 modestum.
 Impatiens fulva.
 Oxalis corniculata.
 stricta.
 Sarothamnus prostratus.
 Ulex strictus.
 Genista humifusa.
 pilosa.
 Ononis reclinata.
 Anthyllus Dillenii.
 Medicago falcata.
 sylvestris.
 Medicago apiculata.
 minima.
 Melilotus vulgaris.
 Trifolium ochroleucum.
 Molincii.
 maritimum.
 Bocconi.
 strictum.
 suffocatum.
 Lotus angustissimus.
 Astragalus alpinus.
 Oxytropis uralensis.
 campestris.
 Arthrolobium ebracteatum.
 Vicia Orobus.
 Bobartii.
 bithynica, α and β .
 gracilis.
 Lathyrus hirsutus.
 palustris.
 tuberosus.
 maritimus.
 acutifolius.
 Orobus tenuifolius.
 niger.
 Prunus insititia.
 domestica.
 Sibbaldia procumbens.
 Potentilla fruticosa.
 rupestris.
 norvegica.
 alpestris.
 mixta.
 Fragaria clatior.
 Rubus Leesii.
 any of the fruticosi named by
 competent authority.
 Rosa rubella.
 hibernica and vars.
 Jundzilliana.
 cryptopoda.
 Borreri.
 sepium.
 caninæ Bakérianæ.
 systyla.
 bibracteata.
 Mespilus germanica.
 Pyrus communis, α and β .
 Malus, α and β .
 rupicola.
 scandica.
 fennica.
 pinnatifida.
 Epilobium brachycarpum.
 rosmarinifolium.

- Epilobium alpinum.*
anagallidifolium.
alsinifolium.
Isnardia palustris.
Myriophyllum verticillatum, α and β.
Callitriche obtusangula.
truncata.
Ceratophyllum, any in fruit.
Lythrum hyssopifolium.
Tamarix anglica.
Herniaria glabra.
Scleranthus perennis.
Ribes sylvestre.
petræum.
spicatum.
Sedum Rhodiola.
Fabaria.
dasyphyllum.
teretifolium (album).
micranthum.
sexangulare.
albescens.
elegans, α and β.
Forsterianum, α and β.
Sempervivum tectorum.
Cotyledon foliosa.
Saxifraga Geum, vars.
hirsuta.
umbrosa, vars. b, c, and d.
nivalis.
Hirculus.
oppositifolia.
cernua.
rivularis.
decipiens.
palmata.
hirta.
affinis.
incurvifolia.
cæspitosa.
Astrantia major.
Eryngium campestre.
Physospermum cornubiense, fruit.
Petroselinum sativum.
Trinia vulgaris.
Helosciadium repens.
Carum Carui.
Bulbocastanum.
Bupleurum falcatum.
Cenanthe pimpinelloides.
silaifolia.
Seseli Libanotis.
Ligusticum scoticum.
Peucedanum officinale.
palustre.
Tordylium maximum.
Daucus maritimus.
Caucalis daucoides.
latifolia.
Coriandrum sativum.
Lonicera Caprifolium.
Xylosteum.
Galium aristatum.
cinereum.
scabrum.
insubricum.
Bakeri.
nitidulum.
anglicum.
Vaillantii.
Valeriana pyrenaica.
Fedia carinata.
Tragopogon grandiflorus.
parviflorus.
Picris arvalis.
Hypochaeris Balbisii.
maculata.
Lactuca Scariola.
Sonchus palustris.
Mulgedium alpinum.
Crepis succisæfolia.
Hieracium collinum.
Species Backhousianæ; any except
Pilosella.
aurantiacum.
murorum.
vulgatum.
tridentatum.
umbellatum.
boreale.
Borkhausia foetida.
taraxacifolia.
Arctium intermedium.
nemorosum.
Saussurea alpina.
Serratula monticola.
Carduus crispus, b and c.
setosus.
tuberosus.
hybridi, all.
Centaurea decipiens.
aspera.
solstitialis.
Bidens radiata.
Artemisia campestris.
Gnaphalium hyperboreum.
margaritaceum.
luteo-album.
norvegicum.
Filago apiculata.

Erigeron alpinus.
Senecio paludosus.
Cineraria ; any.
Doronium plantagineum.
Inula Helenium.
 salicina.
Anthemis anglica.
Campanula patula.
 persicifolia.
Phyteuma spicatum.
Lobelia urens.
Erica Watsoni (sponte).
 ciliaris.
 hibernica.
 vagans.
Menziesia cærulea.
Arbutus alpina.
 Unedo (sponte).
Vaccinium uliginosum.
Pyrola media.
 uniflora.
Monotropa hirsuta.
Fraxinus heterophylla.
Gentiana nivalis.
 germanica.
Cicendia pusilla.
Erythræa latifolia.
Villarsia nymphæoides.
Cuscuta europæa.
 Epilinum.
Solanum miniatum.
 marinum.
Verbascum pulverulentum.
 Blattaria.
 hybrida, all.
Veronica spicata vera.
 triphylls.
 verna.
 humifusa.
 alpina.
 saxatilis.
 hirsuta.
 grandiflora.
Bartsia alpina.
Rhinanthus major.
Melampyrum cristatum.
 arvense.
 montanum.
Scrophularia Scorodonia.
 Ehrharti.
Linaria speciosa.
 Pelisseriana.
Orobanche Rapum.
 caryophyllacea.
 elatior.

Orobanche amethystea.
 Picridis.
 Hederæ.
 rubra.
 cærulea.
 arenaria.
 ramosa.
Salvia clandestina.
 pratensis.
Mentha rotundifolia.
 alopecuroides.
 silvestris and vars.
 piperita.
 vulgaris.
 pubescens, α and β .
 citrata (sponte).
 paludosa.
 rubra.
 gracilis.
 Cardiaca.
 pratensis.
 gentilis and vars.
 agrestis.
 præcox.
 parietariifolia.
Calamintha Briggsii.
Melissa officinalis.
Melittis Melissophyllum.
Teucrium Scordium.
 scordoides.
Ajuga pseudo-alpina.
 pyramidalis.
Leonurus Cardiaca.
Lamium intermedium.
 decipiens.
Galeopsis Ladanum.
 intermedia.
 ochroleuca.
Stachys germanica.
Nepeta parviflora.
Myosotis strigulosa.
 alpestris.
Mertensia maritima.
Symphytum tuberosum.
Borago officinalis.
Anchusa officinalis.
Asperugo procumbens.
Cynoglossum montanum.
Echium violaceum.
Pinguicula grandiflora.
 alpina.
Utricularia neglecta.
 intermedia.
Primula elatior.
 scotica.

Cyclamen hederæfolium.
 Lysimachia thyrsiflora.
 Armeria planifolia.
 plantaginea.
 Statice pyramidalis.
 bahusiensis.
 binervosa.
 Dodartii.
 caspia.
 Plantago Timbali.
 Amaranthus Blitum.
 Chenopodium urbicum.
 intermedium.
 botryoides.
 hybridum.
 Obione pedunculata.
 Atriplex arenaria.
 prostrata.
 erecta.
 Salicornia radicans.
 Polygonum laxum mite.
 aviculare, vars.
 maritimum.
 Rumex pratensis.
 alpinus.
 maritimus.
 palustris.
 Daphne Mezereum.
 Asarum europæum.
 Aristolochia Clematidis.
 Euphorbia Peplis.
 hiberna.
 pilosa.
 coralloides.
 Cyparissias.
 Esula.
 Pseudo-cyparissias.
 Lathyris.
 Buxus sempervirens.
 Mercurialis ovata.
 Urtica pilulifera.
 Dodartii.
 Quercus intermedia.
 Betula pubescens.
 nana.
 Populus alba.
 canescens.
 nigra.
 Salix cuspidata.
 undulata.
 acutifolia.
 Helix.
 rubra.
 Forbyana.
 intricata.

Salix stipularis.
 Smithiana.
 rugosa.
 ferruginea.
 acuminata.
 sphaecclata.
 nigricans, vars.
 laurina (sponte).
 phylicifolia, vars.
 ambigua.
 repens, vars.
 angustifolia.
 Doniana.
 Arbuscula.
 Lapponum.
 lanata.
 procumbens.
 Myrsinites.
 Grahami.
 Pinus sylvestris sponte.
 Taxus fastigiata.
 Spiranthes æstivalis.
 cernua.
 Epipactis media.
 purpurata.
 Cephalanthera rubra.
 Epipogium aphyllum.
 Corallorrhiza innata.
 Orchis laxiflora.
 fusca.
 militaris.
 Simia.
 hircina.
 incarnata.
 Neotinea intacta.
 Ophrys arachnites.
 aranifera.
 fucifera.
 Malaxis paludosa.
 Liparis Loeselii.
 Cypripedium Calceolus.
 Gladiolus illyricus.
 Crocus vernus.
 nudiflorus.
 Sisyrinchium anceps.
 Trichonema Columnæ.
 Narcissus poeticus.
 Leucojum vernum.
 æstivum.
 Lilium Martagon.
 Tulipa sylvestris.
 Allium Ampeloprasum.
 Babingtonii.
 Scorodoprasum.
 complanatum.

Allium Schœnoprasum.
sibiricum.
triquetrum.

Gagea lutea.

Ornithogalum nutans.

Muscari racemosum.

Lloydia serotina.

Simethis bicolor.

Asparagus officinalis.

Maianthemum bifolium.

Polygonatum verticillatum.

officinale.

intermedium.

Stratiotes aloides.

Alisma repens.

natans.

Potamogeton flabellatus.

pectinatus.

filiformis.

trichoides.

compressus.

acutifolius.

zosteræfolius.

acuminatus.

decipiens.

prælongus.

salicifolius.

heterophyllus.

nitens.

lanceolatus.

Lonchitis.

prolixus.

fluitans?

plantagineus.

Ruppia maritima, α.

Zostera angustifolia.

nana.

Naias flexilis.

Wolffia arrhiza.

Arum italicum.

Sparganium natans.

minimum.

Juncus balticus.

acutus.

compressus, α.

castaneus.

capitatus.

biglumis.

Luzula Borreri.

Forsteri.

arcuata.

Cyperus fuscus.

Rhynchospora fusca.

Scirpus carinatus.

triqueter.

Scirpus pungens.
uniglumis.
parvulus.

Eriophorum alpinum.

latifolium.

gracile.

Kobresia caricina.

Carex rupestris.

incurva.

lagopina.

alpicola.

elongata.

Boëninghausenia.

divisa.

divulsa.

Ehrhartiana.

paradoxa.

Vahlîi.

canescens.

atrata.

rigida.

aquatilis.

Watsoni.

stricta.

acuta.

saxatilis.

Grahami.

ustulata.

flava.

lepidocarpa.

œdri.

speirostachya.

punctata.

vaginata.

depauperata.

capillaris.

limosa.

irrigua.

rariflora.

ericetorum.

montana.

tomentosa.

clandestina.

filiformis.

Kochiana.

involuta.

Leersia oryzoides.

Spartina stricta.

alterniflora.

Cynodon Dactylon.

Digitaria humifusa.

Panicum Crus-galli.

Setaria verticillata (sub sponte).

Hierochloc borealis.

Phleum nodosum.

- Phleum asperum.*
 Bœhmeri.
Alopecurus alpinus.
 pronus.
 bulbosus.
Polypogon littoralis.
Apera interrupta.
Agrostis stolonifera.
Arundo stricta.
 lapponica.
Aira alpina.
 uliginosa.
 canescens.
Avena strigosa.
 alpina.
Glyceria plicata.
 pedicellata.
Scicrochloa Borreri.
Poa alpina.
 laxa.
 minor.
 Parnellii.
 cæsia.
 glauca.
 Balfourii.
Festuca uniglumis.
 sylvatica.
 arundinacea.
 loliacea.
Bromus racemosus.
 arvensis.
Triticum biflorum.
 littorale.
 acutum.
 pungens.
Lolium temulentum.
 arvense.
Gymnogramma leptophylla.
- Woodsia ilvensis.*
 hyperborca.
Polypodium cambricum.
 dentatum.
Cystopteris Dickieana.
 alpina.
 montana.
Polystichum lonchitidioides.
Lastrea Filix-mas, vars.
 cristata.
 uliginosa.
 glandulosa.
 collina.
 nana.
 remota.
Athyrium molle.
 latifolium.
Pseudathyrium alpestre.
 flexile.
Asplenium anceps.
 lanceolatum.
 acutum.
 germanicum.
 septentrionale.
Trichomanes radicans.
Botrychium matricarifolium.
Ophioglossum lusitanicum.
 ambiguum.
Isoetes lacustris.
 echinospora.
 Hystrix.
Equisetum umbrosum, fruit.
 trachyodon.
 hyemale.
 Moorei.
 variegatum.
 Wilsoni.
 arenarium.
Chara ; any.

Specimens of any novelties or excluded species will also be acceptable.